

C L A I M S

1. A design supporting system that is connected to a client terminal over a network and supports component design that is executed in the client terminal, the system comprising:

a storage device which stores a material database for managing, with respect to each of materials, a material name of each material, controlled substance information indicative of a content of each of controlled substances included in the material, and discrimination information indicative of permission/non-permission of use of the material;

a design information acquisition unit configured to cooperate with a component design supporting program which is executed by the client terminal, and acquire, from the component design supporting program via the network, component design information including volume information indicative of a volume of a component which is designed using the component design supporting program;

a determination unit configured to determine, when a material selection request relating to the designed component is input from the client terminal via the network, whether each of materials stored in the material database is a usable material for a component classification corresponding to the designed component, based on the discrimination information and information

indicative of a relationship between the component classification and usable materials for the component belonging to the component classification;

5 a generation unit configured to generate, based on a result of the determination, list information indicative of a list of names of usable materials for the component classification corresponding to the designed component, and send the list information to the client terminal over the network;

10 a controlled substance information acquisition unit configured to acquire, from the material database, controlled substance information corresponding to the material name which is selected from the list information by the client terminal;

15 a calculation unit configured to calculate, based on the acquired controlled substance information and the volume information included in the acquired component design information, a content of the controlled substance which is included in the designed component when the material of the selected material name is applied to the designed component; and

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an output unit configured to output the calculated content of the controlled substance as evaluation information of the designed component.

25 2. The design supporting system according to claim 1, wherein the output unit includes means for determining whether the calculated content of the

controlled substance is a predetermined value or more,
and means for prompting, when it is determined that
the calculated content of the controlled substance is
a predetermined value or more, the client terminal
5 over the network to execute one of re-design of the
component and re-selection of the material.

3. The design supporting system according to
claim 1, wherein the calculation unit is configured to
multiply the content of each controlled substance,
10 which is designated in the controlled substance
information, by the volume information, thereby
calculating the content of the controlled substance
that is included in the designed component when the
material of the selected material name is applied to
15 the designed component.

4. The design supporting system according to
claim 1, further comprising:
a database reference request input unit configured
to receive a database reference request, which is
20 transmitted from the client terminal over the network;
and

a unit configured to provide information of the
material database to the client terminal in response to
the input database reference request.

25 5. A program which is stored in a computer-
readable medium and causes a computer, which can
execute communication with a client terminal over

a network, to support component design that is executed in the client terminal, the program comprising:

causing the computer to execute a process of managing a material database which manages, with
5 respect to each of materials, a material name of each material, controlled substance information indicative of a content of each of controlled substances included in the material, and discrimination information indicative of permission/non-permission of use of the
10 material;

causing the computer to execute a process of acquiring component design information including volume information indicative of a volume of a component, which is designed using a component design supporting
15 program that is executed by the client terminal, from the component design supporting program via the network;

causing the computer to execute a process of determining, when a material selection request relating
20 to the designed component is input from the client terminal via the network, whether each of materials stored in the material database is a usable material for a component classification corresponding to the designed component, based on the discrimination
25 information and information indicative of a relationship between the component classification and usable materials for the component belonging to the component

classification;

causing the computer to execute a process of
generating, based on a determination result of the
material determination process, list information that
5 is indicative of a list of names of usable materials
for the component classification corresponding to the
designed component, and sending the material name list
information to the client terminal over the network;

causing the computer to execute a process of
10 acquiring, from the material database, controlled
substance information corresponding to the material
name that is selected from the list information by the
client terminal;

causing the computer to execute a process of
15 calculating, based on the acquired controlled substance
information and the volume information included in the
acquired component design information, a content of the
controlled substance that is included in the designed
component when the material of the selected material
20 name is applied to the designed component; and

causing the computer to execute an evaluation
information output process of outputting the calculated
content of the controlled substance as evaluation
information of the designed component.

25 6. The program according to claim 5, wherein
said causing the computer to execute the evaluation
information output process includes causing the

computer to execute a process of determining whether the calculated content of the controlled substance is a predetermined value or more, and causing the computer to execute a process of prompting, when it is
5 determined that the calculated content of the controlled substance is a predetermined value or more, the client terminal over the network to execute one of re-design of the component and re-selection of the material.

10 7. The program according to claim 6, wherein said causing the computer to execute the calculation process includes causing the computer to execute a process of multiplying the content of each controlled substance, which is designated in the controlled substance
15 information, by the volume information, thereby calculating the content of the controlled substance that is included in the designed component when the material of the selected material name is applied to the designed component.

20 8. The program according to claim 5, further comprising:

causing the computer to execute a process of inputting a database reference request, which is transmitted from the client terminal over the network;
25 and

causing the computer to execute a process of providing information of the material database to

the client terminal in response to the input database reference request.

9. A method of supporting component design that is executed in a client terminal, with use of a computer that can execute communication with the client terminal over a network, the method comprising:

executing a process of managing a material database that manages, with respect to each of materials, a material name of each material, controlled substance information indicative of a content of each of controlled substances included in the material, and discrimination information indicative of permission/non-permission of use of the material;

executing a process of acquiring component design information including volume information indicative of a volume of a component, which is designed using a component design supporting program that is executed by the client terminal, from the component design supporting program via the network;

executing a material determination process of determining, when a material selection request relating to the designed component is input from the client terminal via the network, whether each of materials stored in the material database is a usable material for a component classification corresponding to the designed component, based on the discrimination information and information indicative of a

relationship between the component classification and usable materials for the component belonging to the component classification;

5 executing a process of generating, based on a determination result of the material determination process, list information that is indicative of a list of names of usable materials for the component classification corresponding to the designed component, and sending the list information to the client terminal
10 over the network;

 executing a process of acquiring, from the material database, controlled substance information corresponding to the material name that is selected from the list information by the client terminal;

15 executing a process of calculating, based on the acquired controlled substance information and the volume information included in the acquired component design information, a content of the controlled substance that is included in the designed component
20 when the material of the selected material name is applied to the designed component; and

 executing an evaluation information output process of outputting the calculated content of the controlled substance as evaluation information of the designed
25 component.

10. The method according to claim 9, wherein said executing the evaluation information output process

includes executing a process of determining whether the calculated content of the controlled substance is a predetermined value or more, and executing a process of prompting, when it is determined that the calculated content of the controlled substance is a predetermined value or more, the client terminal over the network to execute one of re-design of the component and re-selection of the material.

11. The method according to claim 9, wherein said executing the calculation process includes executing a process of multiplying the content of each controlled substance, which is designated in the controlled substance information, by the volume information, thereby calculating the content of the controlled substance that is included in the designed component when the material of the selected material name is applied to the designed component.

12. The method according to claim 9, further comprising:
executing a process of inputting a database reference request, which is transmitted from the client terminal over the network; and

executing a process of providing information of the material database to the client terminal in response to the input database reference request.